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Notice of Allowability	Application No.	Applicant(s)	
	10/532,927	FAY ET AL.	
	Examiner	Art Unit	
	Fritz Alphonse	2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 6/08/2007.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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GUY LAMARRE
PRIMARY EXAMINER

DETAILED ACTION

0.1 This Office Action is in response to the amendment filed on 6/08/2007. Claims 1, 2, 4, 7 and 9 are amended.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Yan Glickberg on August 20, 2007.

Claim 10:

In claim 10 line 1, after "A program" add ---stored in computer readable medium-

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Allowable Subject Matter

2. After further search and through examination of the present application and in view of the prior art of record, claims 1-10 are found to be in condition for allowance.

Reason for Allowance

3. The following is an examiner's statement of reasons for allowance: The invention relates to an adaptive Forward Error Correction scheme (FEC) aiming at providing a resilient transport of data via a packet-switched transmission network.

To achieve this inventive goal, independent claim 1 identifies the distinct features “the transmitter includes an encoder for generating redundancy packets above the OSI Network Level (OSI Level 3) from media packets so as to provide an error correction capability at the receiver, the correction capability depending on the amount of redundancy generated by the encoder, and the receiver includes an analyser that is configured to analyze packet errors occurring on the transmission network and determine an optimal amount of redundancy that provides an error correction capability allowing to respect a maximum tolerated packet error rate, and is configured to communicate the optimal amount of redundancy to the transmitter for use by the encoder.”

Independent claim 4 identifies the distinct features “A receiver for receiving media packets and redundancy packets transmitted by a transmitter via a transmission network having a time-varying state, the redundancy packets being generated from the media packets above the OSI Network Level (OSI Level 3) so as to provide an error correction capability of a certain number of packets at the receiver, the receiver comprising: an analyser for analysing packet errors occurring on the transmission network and for determining an optimal amount of redundancy that provides an error correction capability allowing to respect a maximum tolerated packet error rate, and a feedback device that is configured to feed back the optimal amount of redundancy to the transmitter.”

Independent claim 7 identifies the distinct features “an encoder for generating redundancy packets above the OSI Network Level (OSI Level 3) from media packets so as to provide an error correction capability of a certain number of packets at the receiver, the correction capability depending on an amount of redundancy generated by the encoder, and

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the encoder being designed to set the amount of redundancy to an optimal value that gives an error correction capability allowing to respect a maximum tolerated packet error rate defined at the receiver, the optimal value being fed back to the transmitter by the receiver based on prior transmissions from the transmitter.”

Independent claims 9 and 10 identifies the distinct features “A method for determining an amount of redundancy to be used in a forward error correction scheme in which redundancy packets are generated from media packets above the OSI Network Level (OSI Level 3) at a transmitter so as to provide a correction capability of a certain number of packets at a receiver, the method comprising: analysing packet errors occurring on the transmission network at the receiver, determining an optimal amount of redundancy that provides an error correction capability allowing to respect a maximum tolerated packet error rate at the receiver, communicating the optimal amount of redundancy from the receiver to the transmitter.”

The first cited reference Guha (U.S. Pat. No. 5,699,369) discloses an adaptive forward error correction system. The second cited reference Doshi (U.S. Pat. No. 5,130,986) discloses a high speed transport protocol with two windows. The third cited reference Kang (U.S. Pat. No. 6,615,382) discloses a method for controlling errors in a wireless link layer using a simultaneous multiple copy scheme and an adaptive forward error correction scheme.

However, the features disclosed in this instant application (see independent claims 1, 4, 7, 9 an 10) are neither anticipated nor render obvious by the prior art of record.

These limitations, in conjunction with all other limitations of the base claims were not shown by, would not have been obvious over, would not have been fairly suggested by the prior art of record.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to: (703) 872-9306 for all formal communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, whose telephone number is (571) 272-3813. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques, can be reached at (571) 272-6962.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3824

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Fritz Alphonse

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GUY LAMARRE
PRIMARY EXAMINER

August 20, 2007